

## Chapter 3 Regulatory Status

Regulations promulgated under RCRA Subtitle D allow leachate recirculation, provided a composite liner and leachate collection system are included in the design. In the preamble to Subtitle D regulations, implemented in 1991 (US EPA, 1988), EPA commented that :

". . . EPA recognizes that landfills are, in effect, biological systems that require moisture for decomposition to occur and that this moisture promotes decomposition of the wastes and stabilization of the landfill. Therefore, adding liquids may promote stabilization of the unit. . ."

Specifically, Section 258.28(b)(2) of CFR Part 258, "Criteria for Municipal Solid Waste Landfills" states the following:

"Bulk or noncontainerized liquid waste may not be placed in a municipal solid waste landfill unit unless ... the waste is leachate or gas condensate derived from the municipal solid waste landfill unit and the landfill unit is equipped with a composite liner and a leachate collection system that is designed and constructed to maintain less than a 30-cm depth of leachate over the liner."

A telephone poll of US state regulatory agencies was conducted in late 1992 and early 1993. The results of this poll are provided in Table 3-1. To summarize, full-scale operation of leachate recirculation was practiced at that point in time (or would be soon) in twelve states and was permissible in all but seven states. Recirculation facilities were in place at landfills in eight states, under construction at landfills in four states, and planned at landfills in several other states.

For the most part, states merely adopted RCRA criteria, requiring a composite liner. A few states identified additional, more stringent criteria for leachate recirculation. For example, Florida, Georgia, Pennsylvania, and Virginia specifically address odor prevention. Florida requires gas management facilities in place prior to commencement of leachate recirculation. New York requires a double composite liner for all MSW landfills. Pennsylvania and Georgia require that the leachate recirculation piping system be installed under a permeable intermediate cover. Virginia, New York, Georgia, and Florida require control of runoff and prohibit ponding. Georgia also requires that sufficient waste be in place to provide sufficient moisture absorption prior to initiating recirculation.

Those states which prohibited leachate recirculation did so for several reasons. Regulators cited a lack of confidence in the method, interference with the leachate collection system, geological and climate concerns, freezing problems, leachate seepage, lack of waste absorptive capacity, and accelerated gas and odor production. A summary of comments from state regulators is provided as Appendix A.

**Table 3-1. 1993 Status of Recirculation in the United States\***

State	Regulations do not Permit Recirculation	Recirculation Permitted	Recirculation in Place
Alabama		X	
Alaska		X	
Arizona		X	
Arkansas		X	X
California		X	X
Connecticut		X	
Colorado		X	
Delaware		X	X
Florida		X	X
Georgia		X	X
Idaho		X	X
Indiana		X	
Illinois		X	X
Iowa		X	
Kansas		X	
Kentucky		X	
Louisiana	X		
Maine		X	
Maryland		X	X
Massachusetts		X	
Michigan		X	
Minnesota	X		

**Table 3-1. Continued**

State	Regulations do not Permit Recirculation	Recirculation Permitted	Recirculation in Place
Mississippi		X	
Missouri		X	X
Montana		X	
Nebraska		X	
Nevada		X	
New Hampshire		X	X
New Jersey	X		
New Mexico		X	
New York		X	X
North Carolina		X	X
North Dakota		X	
Ohio	X		
Oklahoma		X	
Oregon	X		
Pennsylvania		X	X
Rhode Island		X	
South Carolina	X		
South Dakota		X	
Tennessee		X	
Texas		X	
Utah		X	
Vermont		X	

**Table 3-1. Continued**

State	Regulations do not Permit Recirculation	Recirculation Permitted	Recirculation in Place
Virginia		X	
Washington		X	
West Virginia	X		
Wisconsin	X		
Wyoming		X	

\* A summary of regulator comments is provided as Appendix A